

REMARKS

After entry of this Amendment, claims 1-27 are pending in the application. Claims 21-22 have been withdrawn from consideration. Claims 1, 22, 24 and 26 have been amended to more particularly point out and distinctly claim the subject matter which applicant regards as the invention. Reconsideration of the application as amended is requested.

In the Office Action dated February 11, 2003, the Examiner deemed that the traversed restriction requirement was still proper and therefore made the restriction requirement final. The Examiner is requested to reconsider the finality of the restriction requirement, since in the case of claims related as product, process and product by process claims, the product by process claim is a linking claim and must be examined with the invention elected pursuant to MPEP §809. In the event that the linking claim is found to be allowable, the restriction requirement must also be withdrawn. The Examiner has not cited sufficient basis in the MPEP which contradicts or clarifies the instruction set forth in MPEP §§809 and 809.3. The Examiner's statement that the claims are drawn to a mathematical algorithm is also not understood, since there is no algorithm within claim 21 to the process or to the product by process of claim 22. Therefore, the statement that the algorithm itself may be non-patentable subject matter under Section 101 does not seem appropriate with respect to claims 21 and 22. Further clarification of the Examiner's position is required so that applicant's attorney can determine whether petitioning for reversal of the restriction requirement would be appropriate.

Claims 1-20, and 24-26 stand rejected under 35 USC § 102(b) as being clearly anticipated by Asano (U.S. Patent No. 4,783,610). It is submitted that claim 1 has been amended to more particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the claim now recites that at least one pivotable arm portion is integrally extending through a first end portion from the rigid portion and a force transfer member is integrally extending through a second hinge portion from the rigid portion, where the first and second hinge portions are separated from one another by only a single narrow gap as shown in the drawings of the present application. It is submitted that the Asano reference

does not anticipate, teach or suggest this specific structural configuration, since Asano teaches a lower end 12a of the lever arm 12 extending interposed between the hinges 13 and 15 as best seen in Figure 1. This divides the space between the two hinges 13 and 15 creating two separate gaps, one between the hinge 15 and the lower end 12a of the lever arm and another gap between the lower end 12a upper lever arm 12 and the hinge 13. Therefore, the Asano reference does not anticipate, teach or suggest the invention as recited in the amended claims. Reconsideration of the Examiner's rejection is requested.

Claims 1-20, and 25 stand rejected under 35 U.S.C. §102(b) as being anticipated by Yamauchi et al. (Japanese Patent No. 2-218579). It is submitted that claim 1 has been amended to more particularly point out and distinctly claim the present invention. In particular, claim 1 recites that at least one pivotable arm portion is integrally extending through a first hinge portion from the rigid portion, and a force transfer member is integrally extending through a second hinge portion from the rigid portion, where the first and second hinge portions are separated from one another by only a single narrow gap. As can best be seen in either Figure 1 or 4 of the Yamauchi reference, only a single hinge extends between the rigid portion 3 through first hinge portion 6 and arm 4, while a second hinge portion 7 extends from the rigid portion 3 to the other arm 5. This creates a "scissor-like" configuration. The Yamauchi reference does not disclose a second hinge portion extending between the force transfer member 5B and the arm 4 or 5. Since the structure of the arm 4 and 5 is illustrated as being associated with the corresponding force transfer member 4B, 5B in a non-hinged manner. Therefore, the Yamauchi reference does not anticipate, teach or suggest the invention as recited in the amended claims of the present application. Reconsideration of the Examiner's rejection is requested.

Claims 23 and 27 stand rejected under 35 U.S.C. 103(a) as being unpatentable over either Asano or Yamauchi et al. in view of Hattori et al. (U.S. Patent No. 4, 937,489). The Examiner asserts that it would have been obvious to one having ordinary skill in the art to make the device of either Asano or Yamauchi et al. adjustable by use of an adjustable screw at the time of either invention, such as is taught by Hattori et al. since this would allow for an uncomplicated operation since

this arrangement allows for a satisfactory displacement motion. It is submitted that the addition of the Hattori et al. reference to either Asano or Yamauchi et al. does not overcome the deficiencies of those references, taken singularly or in any permissible combination. In particular, the Hattori et al. reference does not anticipate, teach or suggest at least one pivotable arm portion integrally extending through a first hinge portion from the rigid portion, and a force transfer member integrally extending through a second hinge portion from the rigid portion, where the first and second hinge portions are separated from one another by only a single narrow gap.

Reconsideration of the Examiner's rejection is requested.

Claims 23 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over either Asano or Yamauchi et al. in view of Jaenker (U.S. Patent No. 6,294,859). The Examiner asserts that it would have been obvious to one having ordinary skill in the art to make the device of either Asano or Yamauchi et al. adjustable by using an adjustable screw at the time of either invention, as taught by Jaenker because this would allow for compensation due to expansion caused by temperature, additionally, it would make the device more versatile. It is submitted that the addition of the Jaenker reference to either Asano or Yamauchi et al., taken singularly or any permissible combination, does not anticipate, teach or suggest the invention as recited in amended claims 23 and 27. In particular, the Jaenker reference does not overcome the deficiencies of the Asano reference and the Yamauchi et al. reference discussed in greater detail above. In particular, the Jaenker reference taken singularly or in any permissible combination, does not anticipate, teach or suggest at least one pivotable arm portion integrally extending through a first hinge portion from the rigid portion, and a first transfer member integrally extending through a second hinge portion from the rigid portion, where the first and second hinge portions are separated from one another by only a single, narrow gap as recited in the amended claims. Reconsideration of the Examiner's rejection is requested.

New claims 28-31 are added in the present amendment for the Examiner's consideration. The Examiner's consideration of new claims 28-31 is requested. Based on the Examiner's reliance on the Asano (U.S. Patent No. 4,783,610) reference, it is noted that Figure 4 discloses a prior art configuration

which is believed to correspond with U.S. Patent No. 4,570,095 issued to Uchikawa on February 11, 1986 which was previously cited to the Examiner. In order to clarify for the Examiner the specific teachings of the Uchikawa reference with respect to the present invention, a 132 Declaration has been prepared and is submitted with this amendment. This Declaration by someone skilled in the art points out that the Uchikawa reference specifically states that column 5, lines 30-35 that the theoretical deflection (i.e. the stroke distance) of the printing needle 9 becomes about 1.0 mm., and that the theoretical deflection is somewhat reduced due to the deformation loss of both the lever arms 5 and 6 and the base 2, so that the actual deflection is about 0.6 mm. The Uchikawa reference therefore teaches a device which has a loss of approximately 40% of the theoretical deflection resulting from the stroke distance of the actuator. For purposes of comparison, it should be noted that the estimated loss for the Uchikawa arm movement (excluding the additional band spring 10 movement) is believed to be greater than 40% loss. The claimed invention in the present application is substantially more rigid than the Uchikawa reference, and provides a loss of less than the 40% loss taught by the Uchikawa reference. The Examiner's consideration of the 132 Declaration enclosed with this amendment is requested.

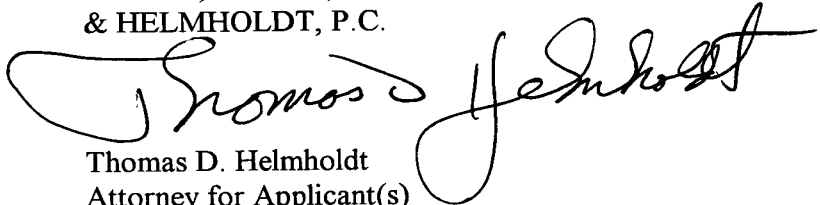
It is respectfully submitted that this Amendment traverses and overcomes all of the Examiner's objections and rejections to the application as originally filed. It is further submitted that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the application. Reconsideration of the application as amended is requested. It is respectfully submitted that this Amendment places the application in suitable condition for allowance; notice of which is requested.

If the Examiner feels that prosecution of the present application can be

expedited by way of an Examiner's amendment, the Examiner is invited to contact the Applicant's attorney at the telephone number listed below.

Respectfully submitted,

YOUNG, BASILE, HANLON, MacFARLANE, WOOD
& HELMHOLDT, P.C.

A handwritten signature in black ink, appearing to read "Thomas D. Helmholdt", written over the printed name.

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